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MARSHALL, OTOOLE, GERSTEIN, MURRAY & BORUN  
6300 SEARS TOWER  
233 SOUTH WACKER DRIVE  
CHICAGO, IL 60606-6402

EXAMINER
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LUGO, CARLOS

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* THEODORE W. MEYERS

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Appeal 2007-3306  
Application 09/652,927  
Technology Center 3600

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Decided: February 26, 2008

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Before WILLIAM F. PATE, III, HUBERT C. LORIN, and JENNIFER D.  
BAHR, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Theodore W. Meyers (Appellant) appeals under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1-6 and 15-23, which are the only pending claims. We have jurisdiction over this appeal under 35 U.S.C. § 6 (2002).

*The Invention*

Appellant's claimed invention "relates generally to pipe fittings and, more particularly, to a tee provided at the inlet and/or outlet of a septic tank and other on-site waste disposal systems" (Specification 1:9-12). Claims 1 and 15 are illustrative of the claimed invention and read as follows:

1. A tee for use at the inlet or outlet of a septic tank, the tee comprising:

an elongated generally cylindrical injection molded plastic main body portion defining a tubular opening, the tubular opening being adapted to receive a filter therein; a cylindrical injection molded plastic uppermost hub coaxial with said elongated main body portion and having an inner diameter greater than said the diameter of the elongated main body portion; and

an inlet/outlet port in communication with the tubular opening, the inlet/outlet port having an inlet/outlet hub at an open end thereof, said inlet/outlet hub having a diameter sized so as to receive a pipe of a first outer diameter and being adaptable to receive a pipe of a second outer diameter, said diameter of the inlet/outlet hub being greater than the diameter of the elongated main body portion.

15. A one-piece sanitary tee baffle comprising:

an elongated generally cylindrical injection molded plastic main body portion defining a tubular opening, the tubular opening being adapted to receive a filter therein;

a cylindrical uppermost hub coaxial with said elongated injection molded plastic main body portion and having an inner diameter greater than said diameter of the elongated injection molded plastic main body portion; an inlet/outlet port in communication with the tubular opening, the inlet/outlet port having an inlet/outlet hub at an open end thereof, said inlet/outlet hub having a diameter sized so as to receive a pipe of a first outer diameter and being adaptable to receive a pipe of a second outer diameter, said diameter of the inlet/outlet hub being greater than the diameter of the elongated main body portion;

a first rib extending generally longitudinally along said elongated main body portion;

a second rib extending generally longitudinally along said elongated injection molded plastic main body portion, said generally cylindrical injection molded plastic main body portion having a wall thickness between 0.075" and 0.100" over a substantial portion thereof.

### *The Rejections*

The Examiner relies upon the following as evidence of unpatentability:

Morrison	US 901,545	Oct. 20, 1908
Wyre	US 1,052,198	Feb. 4, 1913
Ramm	US 3,633,943	Jan. 11, 1972
Carrow	US 4,690,632	Sep. 1, 1987
Pinion	US 4,798,028	Jan. 17, 1989

The following rejections under 35 U.S.C. § 103(a) are before us for review.

Claims 1, 4, 6, and 19 stand rejected as unpatentable over Morrison in view of Carrow.

Claims 1-5, 19, 21, and 23 stand rejected as unpatentable over Ramm in view of Carrow.

Claims 2, 15, 17, 18, 21, and 22 stand rejected as unpatentable over Morrison in view of Carrow and Wyre.

Claim 6 stands rejected as unpatentable over Ramm in view of Carrow and Morrison.

Claim 16 stands rejected as unpatentable over Morrison in view of Carrow, Wyre, and Pinion.

Claim 20 stands rejected as unpatentable over Morrison in view of Carrow and Pinion.

The Examiner provides reasoning in support of the rejections in the Answer (mailed July 12, 2006). Appellant presents opposing arguments in the Appeal Brief (filed June 16, 2006) and Reply Brief (filed September 12, 2006).

#### FINDINGS OF FACT

1. The diameter of the inlet/outlet port 36 of Appellant's sanitary tee 10 is sized so as to accommodate schedule 40 pipes. To accommodate thinner walled or other varying outside diameters of different sized pipes, Appellant's invention contemplates using a cylindrical reducer

- bushing 64, as shown in Figure 2, in the inlet/outlet port 36 of the sanitary tee 10. (Specification 17:25 to 18:7) Thus, Appellant's inlet/outlet hub is "adaptable" to receive a pipe of a second diameter by virtue of its capability of having a cylindrical reducer bushing secured therein to reduce the effective diameter of the inlet/outlet hub.
2. Morrison discloses a sanitary plumbing connection for connecting various fixtures, such as a water closet, for example, with a soil pipe (Morrison 1:14-15). Morrison's invention is adaptable for use for other purposes and is not limited to connecting water closets with soil pipes (Morrison 2:72-76).
  3. Morrison discloses a sanitary tee A comprising a branch a<sup>3</sup> that is enlarged at the outer end to afford a hub to receive oakum and lead calking to close the joint between branch a<sup>3</sup> and an elbow C or C<sup>2</sup> fitted in branch a<sup>3</sup> (Morrison 1:60-72; fig. 1).
  4. Morrison's pipe is cast iron (Morrison 1:31-32).
  5. With reference to Attachment #3 to the Answer, the Examiner finds that Morrison illustrates a reducer bushing (unnumbered) in Figures 1 and 8 (Answer 10). Appellant does not dispute this finding.
  6. Carrow teaches that pipes and pipe fittings have increasingly been manufactured from synthetic polymeric materials (col. 1, ll. 16-18). According to Carrow, pipe fittings such as tees have been produced by injection-molding to produce the relatively complex shapes of such fittings (col. 1, ll. 21-24).

7. Wyre, while specifically directed to metal culvert pipes of the type used for sewers and other conduits (Wyre 1:8-10), teaches formation of lateral ribs 2, annular ribs 3 on one end, and intermediate ribs 4 for strengthening the pipes (Wyre 1:50-55).
8. Ramm discloses a nonpressure pipe fitting molded from a filled thermosetting resin reinforced with glass fiber, such fitting being particularly useful with a rubber ring joint (col. 1, ll. 5-9). The end portions of the arms 4 and 6 and the stem 8 of each of the half sections 2 of the fitting are formed in the mold as a bell end having grooves 10 “to accommodate rubber ring gaskets which are adapted to cooperate in the assembled fitting with pipe ends inserted therein to form a fluidtight seal” (col. 1, ll. 71-75; fig. 1). Inserting a reducer bushing into the end portion of one of the arms 4, 6 or stem 8 would appear to defeat the function of the groove 10.
9. Pinion discloses a downspout trap and clean out comprising a tubular body member 10 provided on the lower end of the lower portion 12 with an inturned flange 14 on which a screen 15 is positioned. The downspout trap and clean out is positioned in the open end of a vertically arranged drain pipe 16 that communicates with a fitting 17 on a drain line 18. Leaves and other debris moving down the downspout is trapped by the screen 15 and prevented from entering the drain pipe, the fitting 17, and the drain line 18. The upper portion of the tubular body member 10 is telescopically engaged over the lower end of a downspout 19 attached to the outside wall 20 of a

- building. (col. 2, ll. 1-22 and 26-29) The downspout 19 is spaced sufficiently from the outside wall 20 of the building to permit the tubular body member 10 to be moved vertically upwardly so that the tubular body member 10 can be tilted sideways and moved downwardly away from downspout 19 to become completely disengaged therefrom. Debris on the screen 15 is removed and the device is replaced. (col. 2, ll. 31-43)
10. The term “effluent” is generally understood, within the context of the on-site waste disposal field, to be “the outflow of a sewer, septic tank, etc.” *Webster's New World Dictionary* 445 (David B. Guralnik ed., 2<sup>nd</sup> Coll. Ed., Simon & Schuster, Inc. 1984).



## PRINCIPLES OF LAW

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of ordinary skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S.Ct. at 1734 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”)

## DISCUSSION

*Claims 1, 4, 6, and 19 as unpatentable over Morrison in view of Carrow*

The Examiner finds that Morrison teaches all of the limitations of independent claim 1 with the exception of the tee being made of an injection molded plastic (Answer 3). Morrison discloses a cast iron pipe fitting (Fact 4). The Examiner contends, however, that it would have been obvious, in view of the teachings of Carrow (Fact 6), to produce Morrison’s tee of an injection molded plastic, since the selection of a known material based upon its suitability for the intended purpose is a design consideration within the

level of skill of one of ordinary skill in the art and, in particular, to offer certain advantages over metal pipes or pipe fittings, such as corrosion resistance and potentially lower material and production costs (Answer 4).

We agree with the Examiner.

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

*KSR*, 127 S.Ct. at 1740. We must ask whether the improvement is more than the predictable use of prior art elements according to their established functions. *Id.* Moreover, the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. *In re Leshin*, 277 F.2d 197, 199 (CCPA 1960).

Carrow's teachings that pipes and pipe fittings have increasingly been manufactured from synthetic polymeric materials and that pipe fittings such as tees have been produced by injection-molding to produce the relatively complex shapes of such fittings (Fact 6) evidences both the suitability of injection-molded plastic for pipe fittings and the market trend to so produce pipe fittings. We thus conclude that to produce Morrison's sanitary tee from

injection-molded plastic is nothing more than the predictable use of prior art elements according to their established functions and thus would have been *prima facie* obvious to a person of ordinary skill in the art.

Appellant argues that Morrison is non-analogous art and thus should not be relied upon to support an obviousness rejection (Appeal Br. 14).

“A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem.” In other words, “familiar items may have obvious uses beyond their primary purposes.”

*In re Icon Health and Fitness, Inc.*, 496 F.3d 1374, 1379-80 (Fed. Cir. 2007) (citations omitted). Moreover, in making a determination with regard to obviousness, we should not limit ourselves to looking only at the problem Appellant was trying to solve. The question is not whether the combination was obvious to Appellant but whether it was obvious to a person with ordinary skill in the art. Thus, “[u]nder the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed.” *KSR*, 127 S.Ct. at 1742.

Initially, given Appellant's description of the present invention as relating “generally to pipe fittings and, more particularly, to a tee provided at the inlet and/or outlet of a septic tank and other on-site waste disposal systems” (Specification 1:9-12), we find Morrison's sanitary plumbing

connection or tee falls within Appellant's broad field of endeavor of pipe fittings. Further, Morrison recognizes that Morrison's invention is adaptable for use for other purposes and is not limited to connecting water closets with soil pipes (Fact 2). As both Morrison and Appellant address techniques for securely connecting sanitary tees to piping, Morrison would have logically commended itself to an inventor's attention in addressing issues directed to forming secure connections of pipe fittings generally and for use at the inlet or outlet of a septic tank. We thus conclude that Morrison is analogous art to Appellant's invention and can properly be relied upon to support an obviousness rejection.

Appellant also argues that "Morrison does not disclose making an inlet/outlet port adaptable, by using a reducer or otherwise, to accept a pipe of a first diameter or a second diameter" (Appeal Br. 16). In support of this argument, Appellant refers to paragraph 6 of the Supplemental Affidavit of Theodore Meyers included in the Evidence Appendix to the Appeal Brief, wherein the affiant points out that Morrison's ring a<sup>6</sup> is not a reducer, because there is no teaching in Morrison of a pipe received inwardly of the ring. This argument is not well founded. Claim 1 does not require use of a reducer or otherwise. Claim 1 merely requires an inlet/outlet hub having a diameter sized so as to receive a pipe of a first outer diameter and being adaptable to receive a pipe of a second outer diameter. Appellant's inlet/outlet hub, like that of Appellant, is "adaptable" to receive a pipe of a second diameter by virtue of its capability of having a cylindrical reducer bushing secured therein to reduce the effective diameter of the inlet/outlet

hub (Fact 1). The enlarged hub of Morrison's branch a<sup>3</sup> is fully capable of having a cylindrical reducer bushing secured therein to reduce the effective diameter of the hub and thus meets the "adaptable to receive a pipe of a second outer diameter" limitation of claim 1.

In light of the above, the Examiner has established a *prima facie* case that claim 1 is unpatentable over Morrison in view of Carrow. Claims 4 and 19 stand or fall with claim 1 (Appeal Br. 17).

Appellant argues that Morrison does not disclose the use of a reducer bushing, as called for in claim 6 (Appeal Br. 17). With reference to Attachment #3 to the Answer, which appears to show enlargements of the hub regions of Figures 1 and 8 of Morrison, the Examiner identifies structure outside of the oakum and lead caulking as a reducer bushing (Answer 10). Appellant does not dispute the Examiner's determination that the identified structure is a "reducer bushing" (Fact 5), choosing instead to fall back on the argument that Morrison is non-analogous art (Reply Br. 4). In light of our conclusion, *supra*, that Morrison is analogous art and can properly be relied upon to support an obviousness rejection and the Examiner's undisputed finding that Morrison discloses a reducer bushing, the Examiner has established a *prima facie* case that claim 6 is unpatentable over Morrison in view of Carrow.

*Claims 2, 15, 17, 18, 21, and 22 as unpatentable over  
Morrison in view of Carrow and Wyre*

Appellant does not argue any of claims 2, 15, 17, 18, 21, and 22 separately from the other claims. Thus, in accordance with 37 C.F.R. § 41.37(c)(1)(vii), we select claim 15 as the representative claim to decide the appeal of this rejection, with claims 2, 17, 18, 21, and 22 standing or falling with claim 15.

The Examiner finds that Morrison, as modified in view of Carrow, lacks reinforcing ribs, but determines that it would have been obvious to a person of ordinary skill in the art at the time of Appellant's invention to incorporate reinforcing ribs, as taught by Wyre (Fact 7) into Morrison's tee, as modified in view of Carrow, to strengthen the pipe fitting (Answer 6).

Appellant argues that Appellant's claimed injection-molded plastic tee, for use at the inlet or outlet of a septic tank, in conjunction with effluent filters, is not a pipe fitting (Appeal Br. 19). We do not agree. First, we observe that claim 15 does not mention a septic tank. Furthermore, a tee is a pipe fitting, as evidenced by Carrow (Fact 6), notwithstanding that it may be made of injection-molded plastic or have a tubular opening adapted to receive a filter therein.

Appellant also argues that Morrison and Wyre are non-analogous and thus too remote to be treated as prior art under 35 U.S.C. § 103 (Appeal Br. 19). For the reasons discussed above, we have already determined that Morrison is analogous art and can properly be relied upon to support an obviousness rejection. Wyre addresses increasing pipe strength (Fact 7), an issue recognized in Appellant's field of endeavor (Specification 6:8-25), and

thus can provide a reason for combining the reinforcing ribs taught by Wyre with the sanitary tee of Morrison.

Appellant additionally argues that even if one were motivated by Wyre to incorporate reinforcing ribs on a pipe fitting, there is still no suggestion to provide reinforcing ribs on an injection-molded plastic tee at the inlet or outlet of a septic tank (Appeal Br. 19). We do not agree. A person of ordinary skill in the art, being “also a person of ordinary creativity, not an automaton,” *KSR*, 127 S.Ct. at 1742, would readily appreciate that reinforcing ribs would provide similar strengthening benefits on other pipe components, such as pipe fittings, including injection-molded plastic pipe tees. Moreover, the inclusion of reinforcing ribs on Morrison’s tee, as modified in view of Carrow, would not appear to be uniquely challenging to a person of ordinary skill in the art and would seemingly involve nothing more than the predictable use of prior art elements according to their established functions.

In light of the above, the Examiner has established a *prima facie* case that the subject matter of claim 15 is unpatentable over Morrison in view of Carrow and Wyre.

*Claim 16 as unpatentable over Morrison in view of  
Carrow, Wyre, and Pinion*

The Examiner finds that Morrison is capable of receiving a filter but fails to disclose an effluent filter received in the tubular opening thereof (Answer 7). The Examiner determines, however, that it would have been

obvious to a person of ordinary skill in the art at the time of Appellant's invention to incorporate into the tee of Morrison, as modified in view of Carrow and Wyre, a filter, as taught by Pinion (Fact 9), in order to filter the fluid that flows in the pipe system (Answer 8). Appellant does not contest the Examiner's determination that it would have been obvious to incorporate a filter as taught by Pinion into Morrison's tee. Rather, the only argument made by Appellant is that the flat screen type filter of Pinion is not an "effluent filter" as recited in claim 16 (Appeal Br. 21-22). The basis of Appellant's argument is that those of ordinary skill in the art would understand an effluent filter to be "one that would not clog quickly when exposed to grease, fats, oils, hair, lint, and other floatables in effluent, and resist clogs due to biologic growth on such materials trapped by the effluent filter" (Reply Br. 6). According to Appellant, a flat screen of the type disclosed by Pinion lacks sufficient surface area to resist such clogs and is therefore not an "effluent filter." *Id.*

Appellant does not provide any evidence that the terminology "effluent filter" has the meaning argued by Appellant to a person of ordinary skill in the art. Nor does Appellant proffer any evidence to support the contention that a flat screen filter of the type taught by Pinion lacks sufficient surface area to resist such clogs. An attorney's arguments in a brief cannot take the place of evidence. *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974). Moreover, as evidenced by Nurse (US 5,382,357, issued January 17, 1995, referred to on page 2, in lines 5-6, of Appellant's Specification as an exemplary single-pass effluent filter), prior art effluent



filters have limited flow capabilities and tend to clog easily (Nurse, col. 1, ll. 32-33). Such inferior filters are nonetheless effluent filters. Pinion's filter screen 15 traps leaves and other debris entrained in the water traveling down the downspout (Fact 9), and would likewise trap debris in the fluid, or effluent (Fact 10), flowing through Morrison's tee. Pinion's filter screen 15 is thus an effluent filter. That it might be far inferior to more advanced effluent filters commonly used at the outlets of septic tanks does not mean it is not an effluent filter.

For the above reasons, the Examiner has established a *prima facie* case that claim 16 is unpatentable over Morrison in view of Carrow, Wyre, and Pinion.

*Claim 20 as unpatentable over Morrison in view of Carrow and Pinion*

Appellant argues that none of the references relied upon in the rejection shows tees mounted at septic tank outlets or an effluent filter as that term is understood by those of ordinary skill in the art. Thus, according to Appellant, a *prima facie* case of obviousness has not been established. (Appeal Br. 23)

Appellant's argument that none of the references shows tees mounted at septic tank outlets is not persuasive, as it is not commensurate with the scope of claim 20. It is well established that limitations not appearing in the claims cannot be relied upon for patentability. *In re Self*, 671 F.2d 1344, 1348 (CCPA 1982). Claim 20 does not recite a tee mounted at a septic tank outlet. Rather, claim 20 recites a tee *for use* at the inlet or outlet of a septic

tank, wherein the lowermost end extends into a clear zone of the septic tank *when* the tee is mounted at the septic tank outlet. Thus, claim 20 merely requires that the tee have the capability to be mounted at the septic tank outlet, not that it actually be mounted at the septic tank outlet. As evidenced by Appellant's Specification, installers of septic tanks and other on-site waste disposal systems have traditionally used standard tees or sweep tees manufactured for use in plumbing applications (Specification 2:14-17). Morrison's tee appears reasonably capable of use at the outlet of a septic tank and Appellant has not presented any evidence as to why it lacks such capability.

Appellant's argument that none of the applied references shows an effluent filter is not persuasive, for the reasons discussed above with regard to claim 16.

Appellant thus fails to demonstrate that a *prima facie* case of obviousness of the subject matter of claim 20 has not been established.

*Claims 1-5, 19, 21, and 23 as unpatentable over Ramm in view of Carrow*

The Examiner finds that Ramm discloses all the limitations of independent claims 1 and 23 except the tee being made of an injection-molded plastic. The Examiner determines, however, that it would have been obvious, in view of the teachings of Carrow, to produce Ramm's tee of an injection-molded plastic. (Answer 5)

Appellant argues that Ramm lacks an inlet/outlet hub having a diameter sized to receive a pipe of a first outer diameter and being adaptable

to receive a pipe of a second outer diameter, as called for in independent claims 1 and 23 (Appeal Br. 18). In response, with reference to Attachments #4 and #5 to the Answer, the Examiner contends that the end portion of Ramm's stem 8 is capable of receiving different pipe sizes "[b]y providing pipe seat[s] having different diameter" (Answer 10).

From our review of Attachment #5, we understand the Examiner's position to be that the end portion of stem 8 has a diameter sized to receive a pipe having a first outer diameter, so as to be seated in groove 10, and is adaptable to receive a pipe having a second outer diameter, so as to be seated on the shoulder of the enlarged end portion. The Examiner's position that a pipe can actually be seated in groove 10 of Ramm is speculative. While the lip forming the side wall of groove 10 closest to the open end of the stem 8 appears to be illustrated in Figure 1 as having a slightly larger diameter than the inner diameter of the remainder of the enlarged end portion, Ramm is silent as to this relationship and gives no indication that the lip is intended to have a larger diameter than the remainder of the enlarged end portion or that the groove 10 is capable of seating a pipe, as shown in the Examiner's Attachment #5. The stated purpose of Ramm's groove 10 is to accommodate a rubber ring gasket which is adapted to cooperate in the assembled fitting with a pipe end inserted therein to form a fluidtight seal (Fact 8).

Moreover, we find that Ramm's enlarged end portion, unlike that of Morrison, is *not* adaptable to receive a pipe having a second outer diameter by inserting a reducer bushing. Inserting a reducer bushing into the end

portion of one of the arms 4, 6 or stem 8 of Ramm would appear to defeat the function of the groove 10 (Fact 8).

In light of the above, we conclude that the Examiner has not established a *prima facie* case that independent claims 1 and 23 are unpatentable over Ramm in view of Carrow. The rejection of claims 1 and 23 and claims 2-5, 19, and 21 depending from claim 1 as unpatentable over Ramm in view of Carrow is reversed.

*Claim 6 as unpatentable over Ramm in view of Carrow and Morrison*

The Examiner's rejection is grounded in part on the Examiner's determination that it would have been obvious, in view of the teachings of Morrison, to use a reducer bushing to adapt the enlarged end portion of Ramm's tee to receive a pipe of a first or second outer diameter (Answer 7). Where the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, the proposed modification would not have been obvious. *See Tec Air Inc. v. Denso Mfg. Michigan Inc.*, 192 F.3d 1353, 1360 (Fed. Cir. 1999); *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984). As discussed above, inserting a reducer bushing into the end portion of one of the arms 4, 6 or stem 8 of Ramm would appear to defeat the function of the groove 10 (Fact 8) and thus would not have been obvious to a person of ordinary skill in the art.

The Examiner has not established a *prima facie* case that claim 6 is unpatentable over Ramm in view of Carrow and Morrison. The rejection is reversed.

*Secondary Considerations*

Having concluded, for the reasons discussed above, that the applied references are sufficient to establish a *prima facie* case of obviousness of the subject matter of claims 1, 6, 15, 16, and 20, we recognize that evidence of secondary considerations, such as that presented by Appellant in this application, must be considered en route to an ultimate determination of obviousness or nonobviousness under 35 U.S.C. § 103. Accordingly, we consider anew the issue of obviousness under 35 U.S.C. § 103, carefully evaluating and weighing both the evidence relied upon by the Examiner and the evidence provided by Appellant. *See In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984) and *Stratoflex Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1538 (Fed. Cir. 1983).

Appellant relies on three affidavits of Theodore W. Meyers (Appellant) as evidence of commercial success and copying by others, both recognized as secondary considerations or factors weighing in favor of non-obviousness (Appeal Br. 24-27). The three affidavits, all included in the Evidence Appendix to the Appeal Brief, include a Meyers Affidavit (filed December 2, 2002), a Supplemental Meyers Affidavit (filed August 7, 2003), and a Third Meyers Affidavit (filed March 25, 2005).

The Meyers affidavits all include sales records showing sales by Tuf-Tite, a manufacturer and supplier of various products in the septic tank and other on-site waste disposal equipment field (Meyers Affidavit, ¶ 6), of a tee “made in accordance with the claims of the subject application, sold under

the trade name ‘T-BAFFLE,’ and under Tuf-Tite’s product number ‘TB-4’” (Meyers Affidavit, ¶ 7). Tuf-Tite sold 43,198 TB-4 T-BAFFLE tees from March 1, 2001 through February 28, 2002; 55,144 TB-4 T-BAFFLE tees from March 1, 2002 through February 28, 2003; 67,638 TB-4 T-BAFFLE tees from March 1, 2003 through February 27, 2004; and 99,531 TB-4 T-BAFFLE tees from March 1, 2004 through February 28, 2005, totaling 265,511 TB-4 T-BAFFLE tees from March 1, 2001 through February 28, 2005 (Third Meyers Affidavit, ¶ 6). None of the Meyers affidavits gives any indication as to the market share of products for this use that the TB-4 T-BAFFLE sales represent. Tuf-Tite’s gross sales of 265,511 TB-4 T-BAFFLE tees, without evidence as to whether this represents a substantial share of any definable market, provide a very weak showing of commercial success, if any. *See In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996).

Appellant argues that a comparison of sales of Appellant’s invention to sales of conventional plumbing tees used prior to Appellant’s invention for the inlet or outlet of a septic tank would be a meaningless exercise, as such conventional plumbing tees are primarily intended for use in indoor plumbing applications, which is a much larger market than septic tanks (Appeal Br. 24-25). While this may be correct, a comparison of sales of Tuf-Tite’s TB-4 T-BAFFLE tees with sales of other products used in the same application, that is, for the inlet or outlet of a septic tank, would appear to be quite relevant. In any event, without any evidence of the market share that Tuf-Tite’s TB-4 T-BAFFLE gross sales represent, these gross sales numbers cannot provide a strong showing of commercial success.

Even assuming Appellant had sufficiently demonstrated commercial success, that success is relevant in the obviousness context only if it is established that the sales were a direct result of the unique characteristics of the claimed invention, as opposed to other economic and commercial factors unrelated to the quality of the claimed subject matter. *Huang*, 100 F.3d at 140. Meyers' statement that he "[considers] all the commercial success of Tuf-Tite's T-BAFFLE tees to be attributable to the claimed features of the subject patent application, as [he knows] of no other reasons that would have caused such a high volume of sales" (Meyers Affidavit, ¶ 8) is conclusory and not supported by factual evidence. The statement that the claimed features of an inlet/outlet hub having a diameter sized to receive a pipe of a first outer diameter and being adaptable to receive a pipe of a second outside diameter, the inlet/outlet hub being greater than the diameter of the elongated main body portion, and the claimed wall thickness of claim 15 "are understood to be why [Zabel Environmental Technology (hereinafter "Zabel")] bought 14,040 of Tuf-Tite's TB-4 tees, and then later came out with the Zabel 'Versa-Tee<sup>TM</sup>'" (Meyers Affidavit, ¶ 16), likewise, is conclusory. Appellant has not presented any evidence establishing the basis for this understanding. Meyers also states that the TB-4 T-BAFFLE tees "have not been advertised or marketed in a manner, or at any level, differently from any of the numerous other on-site waste system and related component products sold by Tuf-Tite" (Third Meyers Affidavit, ¶ 21), but does not specify what the level or manner of such advertising and marketing has been. Accordingly, we cannot determine on the basis of the record

before us whether the manner or content of the advertising of the TB-4 T-BAFFLE product may have contributed to any commercial success that product has enjoyed. Moreover, Appellant has not presented any evidence as to the relative pricing of the TB-4 T-BAFFLE and other alternative products on the market suitable for the same applications. Meyers does characterize the TB-4 T-BAFFLE tee as a “low-cost” alternative to products primarily intended for other purposes (Third Meyers Affidavit, ¶ 25), indicating that price, rather than claimed attributes of the invention, may be responsible for any commercial success of the TB-4 T-BAFFLE tee.

Appellant also cites products introduced by its competitors Zabel and Polylok, Inc. (hereinafter “Polylok”) after the introduction of Tuf-Tite’s TB-4 T-BAFFLE tees as evidence of copying by others (Appeal Br. 26). Alleged copying is not persuasive of nonobviousness when the copy is not identical to the claimed product and the alleged copier had not expended extensive effort to develop its own solution. *Pentec, Inc. v. Graphic Controls Corp.*, 776 F.2d 309, 317 (Fed. Cir. 1985).

Appellant has not presented any evidence that either Zabel or Polylok had expended any effort, much less extensive effort, to develop its own universal tee product for use at the inlet or outlet of a septic tank. In fact, the Meyers Affidavit, in paragraph 10, states that Zabel did not manufacture any such tee product prior to June 19, 2000, when Zabel purchased 14,040 TB-4 T-BAFFLE tees from Tuf-Tite.

Moreover, while the marketing materials for Zabel’s Versa-Tee™ product attached as Appendix 4 to the Meyers Affidavit do tout an outlet



that accepts SDR 35 (thin-wall) pipe or SCH 40 pipe, the materials also tout a by-pass protection feature in the form of a built-in filter screen, for use on the outlet side of a septic tank. Additionally, Zabel's Versa-Tee™ appears to have an additional step-down shoulder molded right into the inlet/outlet hub to provide a first diameter for accepting schedule 40 pipe and a second diameter for accepting thin-wall SDR 35 pipe. This is in contrast to Appellant's disclosed invention, which uses a reducer bushing to adapt the inlet/outlet hub to receive pipe having a second outer diameter, and Appellant's claimed invention, which does not include such an integrally molded reducer. The Polylok PL-68 tee likewise differs from Appellant's disclosed and claimed invention, in that it comprises "an integral nested cylindrical portion extending coaxially with, and located within, the inlet/outlet hub" (Third Meyers Affidavit, ¶ 35) to adapt the hub to receive a pipe of a first outer diameter and a pipe of a second outer diameter. This feature can be seen in the photograph on page 68 of the Polylok 2005 catalog attached at Tab 6 of the Third Meyers Affidavit and in the photographs of the Polylok product attached at Tab 7 of the Third Meyers Affidavit.

For the above reasons, the evidence of copying by others presented by Appellant is not persuasive of nonobviousness of Appellant's claimed invention.

### CONCLUSIONS OF LAW

After reviewing all of the evidence before us, including the totality of Appellant's evidence in the form of the three Meyers affidavits, it is our conclusion that, on balance, the evidence of nonobviousness fails to outweigh the evidence of obviousness discussed above and, accordingly, the subject matter of claims 1, 6, 15, 16, and 20 would have been obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. §103 at the time Appellant's invention was made. *See Richardson-Vicks Inc. v. Upjohn Co.*, 122 F.3d 1476, 1483 (Fed. Cir. 1997).

### ORDER

The rejections of claims 1, 4, 6, and 19 as unpatentable over Morrison in view of Carrow; claims 2, 15, 17, 18, 21, and 22 as unpatentable over Morrison in view of Carrow and Wyre; claim 16 as unpatentable over Morrison in view of Carrow, Wyre, and Pinion; and claim 20 as unpatentable over Morrison in view of Carrow and Pinion are sustained.

The rejections of claims 1-5, 19, 21, and 23 as unpatentable over Ramm in view of Carrow and claim 6 as unpatentable over Ramm in view of Carrow and Morrison are reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED-IN-PART

Appeal 2007-3306  
Application 09/652,927

JRG

MARSHALL, O'TOOLE, GERSTEIN, MURRAY & BORUN  
6300 SEARS TOWER  
233 SOUTH WACKER DRIVE  
CHICAGO, IL 60606-6402